

S/N 09/039,344



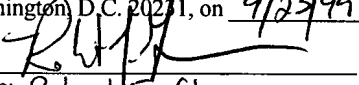
CP2816

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: KIMSAL ET AL. Examiner: M. NGUYEN  
Serial No.: 09/039,344 Group Art Unit: 2816  
Filed: MARCH 13, 1998 Docket No.: 12583.5USU1  
Title: TIME INTERVAL MEASUREMENT SYSTEM INCORPORATING A  
LINEAR RAMP GENERATION CIRCUIT

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on 9/23/99.

By:   
Name: Robert J. Glance

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Wavecrest Corporation, a corporation organized and existing under the laws of the State of Minnesota, having a place of business at 7275 Bush Lake Road, Edina, Minnesota 55439, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

- A. ☒ An assignment from the inventor(s), of the patent application identified above.

The assignment was recorded in the Patent and Trademark Office on March 13, 1998, at Reel 9053, Frame(s) 0006, for which a copy is attached.

- B. ☐ A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the  
assignee.

I hereby declare that all statements made herein of my own knowledge are true, and  
that all statements made on information and belief are believed to be true; and further, that these  
statements are made with the knowledge that willful false statements, and the like so made, are  
punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States  
Code, and that such willful false statements may jeopardize the validity of the application or any  
patent issuing thereon.

Date: July 30, 1999

By: Paul J. Anderson  
Name: Paul J. Anderson  
Title: Director of Engineering



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
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MAY 20, 1998

PTAS  
LARKIN, HOFFMAN, DALY & LINDGREN, LTD.  
JOHN F. KLOS  
1500 NORWEST FINANCIAL CENTER  
7900 XERXES AVENUE SOUTH  
BLOOMINGTON, MINNESOTA 55431



\*100674785A\*



UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/13/1998

REEL/FRAME: 9053/0006  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS)

ASSIGNOR:  
KIMSAL, CHRISTOPHER

DOC DATE: 03/12/1998

ASSIGNOR:  
WILSTRUP, JAN B.

DOC DATE: 03/13/1998

ASSIGNEE:  
WAVECREST CORPORATION  
7275 BUSH LAKE ROAD  
EDINA, MINNESOTA 55439

SERIAL NUMBER: 09039344  
PATENT NUMBER:

FILING DATE:  
ISSUE DATE:

SHAREILL COLES, EXAMINER  
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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party (ies):

Christopher Kimsal  
Jan B. Wilstrup

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other: Letters Patent of Amalgamation

Execution

2. Name and address of receiving party(ies)

Name: Wavecrest Corporation

Internal Address:

Street Address: 7275 Bush Lake Road

City: ZIP: Edina, Minnesota 55439

Additional name(s) & address(es) attached? ☐ Yes ☒ No



4. Application number(s) or patent number(s) :

09/039,344

If this document is being filed together with a new application, the execution date of the application is: March 13, 1998

A. Patent Application No. (s)

B. Patent No. (s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John F. Klos

Internal Address: Larkin, Hoffman, Daly & Lindgren, Ltd.

Street Address: 1500 Norwest Financial Center  
7900 Xerxes Avenue South

City: Bloomington State: Minnesota ZIP: 55431

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

8. Deposit account number:

12-0449

(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John F. Klos, Registration No. 37,162

Name of Person Signing

Signature

3-13-98

Date

Total number of pages including cover sheet, attachments, and document:

3

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
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**ASSIGNMENT**

**WHEREAS**, Christopher Kimsal, a citizen of the United States, residing at 7040 Derby Drive, Chanhassen, Minnesota 55317, and Jan B. Wilstrup, a citizen of the United States, residing at 7857 Bona Road, Moundsview, Minnesota 55112, made an invention disclosed and claimed in an Application for United States Letters Patent filed, the specification of which is attached hereto, and entitled: Time Interval Measurement System Incorporating a Linear Ramp Generation Circuit; and

**WHEREAS**, Wavecrest Corporation, a corporation organized and existing under and by virtue of the laws of the State of Minnesota, and having a principal place of business at 7275 Bush Lake Road, Edina, Minnesota 55439 (hereafter "Wavecrest"), is desirous of acquiring the entire right, title, and interest in and to said invention, the U.S. and foreign Letters Patent that may be issued thereon, and any improvements thereto;

**NOW THEREFORE**, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title, and interest of said Christopher Kimsal and of said Jan B. Wilstrup, in and to said application for United States Letters Patent, the Invention disclosed and claimed therein, and any resultant patent or patents for said Invention and any renewals, reexaminations, reissues, extensions, substitutions, continued prosecution applications, continuations, continuations-in-part, or divisionals thereof, including all foreign patents or rights claiming the benefit of priority therefrom or relating thereto, as fully set forth and described in the specification of said application for Letters Patent, is hereby sold, assigned and transferred unto Wavecrest.

Pursuant to this Assignment Christopher Kimsal and Jan B. Wilstrup warrant that they have made no other assignment, license, transfer, grant, mortgage, encumbrance, or other agreement regarding or affecting the rights and intellectual property interests in the subject invention to or with any party other than Wavecrest; and agree that they and their executors or legal representatives will make, execute, and deliver any and all written instruments including

application papers, affidavits, assignments, or other documents as requested by Wavecrest; will promptly communicate to Wavecrest any facts or circumstances known to them regarding the conception or reduction to practice of the invention or improvements thereon; will cooperate with and testify on behalf of Wavecrest in any proceeding before the U.S. Patent and Trademark Office, foreign patent office, state or federal court, or any administrative body or alternate dispute resolution forum; and generally do all things which may be desirable or necessary in the view of Wavecrest to vest, obtain, secure, perfect, maintain, or enforce any rights under the invention, application, Letters Patent, or similar proprietary intellectual property rights created or subsisting therein, or any improvement thereto, which are the subject of this Assignment.

The Commissioner of Patents is hereby authorized and requested to issue said Letters Patent in accordance with this Assignment.

Dated: 3/12/98

Christopher Kimsal  
Christopher Kimsal

Dated: 3/12/98

Bradley Hegge  
Witness as to Christopher Kimsal

Dated: MARCH 13, 1998

Jan B. Wilstrup  
Jan B. Wilstrup

Dated: 3-13-98

Bradley Hegge  
Witness as to Jan B. Wilstrup